

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023996**Date Inspected:** 19-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

NDT

Outside Yard – OBG Trial Assembly

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 09176.

Magnetic Particle Testing (MT).

This QA inspector performed MT of approximately 15 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

SEG3013K-024.

**WELDING**

This QA Inspector observed the following work in progress:

Outside Yard – OBG Trial Assembly

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## WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 040611 perform repair welding by Shielded Metal Arc Welding (SMAW), on Anchor plate to Side plate weld of OBG Segment 14W. Weld joint is identified as SEG3020AQ-025. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-1G-FCM-Repair-1, which is used as per Critical welding repair report B-CWR2923 R1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040655 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam I Rib stiffener to I Rib stiffener weld at panel point 126 of OBG Segment 14W. Weld joint is identified as SEG3020Q-091. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067764 perform repair welding by Shielded Metal Arc Welding (SMAW), on Top Anchor plate to Vertical Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020U-591. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1, which is used as per Critical welding repair report B-CWR2943 R1. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 067572 perform welding by Shielded Metal Arc Welding (SMAW), on Side plate to Edge plate weld between panel points 128 and 128.3 of OBG Segment 14W. Weld joint is identified as SEG3020AZ-020. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 057220 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam to Sub Assembly part SA3416 weld at panel point 128.7 of OBG Segment 14W. Weld joint is identified as SEG3020C-029. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067765 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam I Rib stiffener to Anchor plate weld at panel point 127 of OBG Segment 14W. Weld joint is identified as SEG3020AQ-012. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 068097 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel DP3177 to Deck panel DP3183 weld of OBG Segment 14W. Weld joint is identified as SEG3020-011. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037723 perform welding by Shielded

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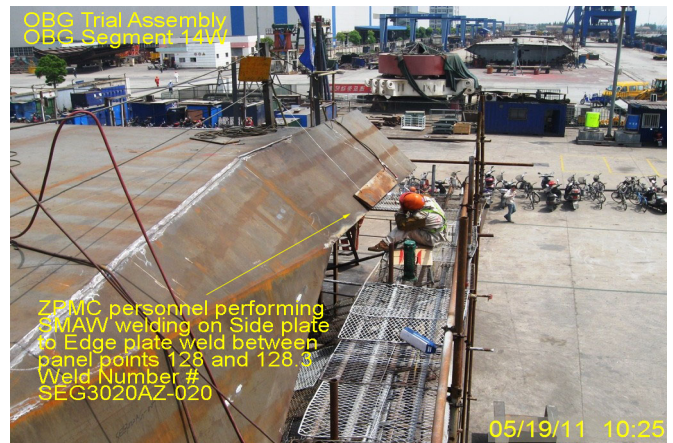
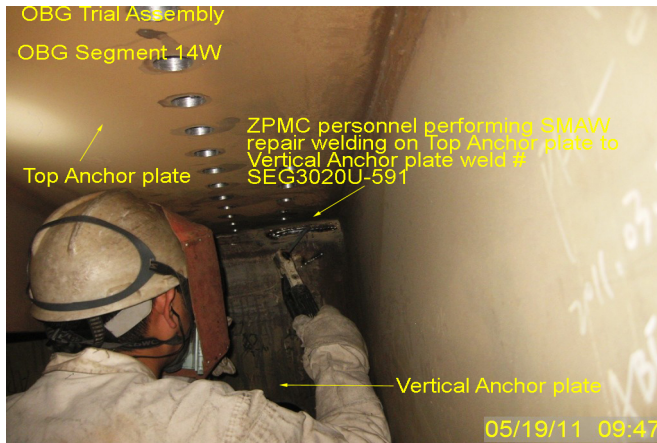
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Metal Arc Welding (SMAW), on Deck panel DP3174 to Deck panel DP3175 weld of OBG Segment 14W. Weld joint is identified as SEG3020-008. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No significant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Upadhye, Anand	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford, William	QA Reviewer

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